

Page 1 of 6 AUG 0 8 2000

TECH CENTER 1600/2900

1644

RAW SEQUENCE LISTING

3 <110> APPLICANT: Crameri, Reto

PATENT APPLICATION: US/09/319,806

DATE: 07/31/2000

TIME: 15:13:02

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Output Set: N:\CRF3\07312000\I319806.raw

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Hemman, Stefanie
              Blaser, Kurt
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              Aspergillosis
     10 <130> FILE REFERENCE: 10806-93
C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/319,806
    13 <141> CURRENT FILING DATE: 1999-08-19
     15 <150> PRIOR APPLICATION NUMBER: SE9604815-2
     16 <151> PRIOR FILING DATE: 1996-12-20
     18 <150> PRIOR APPLICATION NUMBER: PCT/SE97/02171
     19 <151> PRIOR FILING DATE: 1997-12-19
     21 <160> NUMBER OF SEQ ID NOS: 8
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     43 atgtgggage atgettaeta cetteagtae ttgaacgaea aageetegta tgecaaggge 540
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                                         25
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     64 Thr Tyr Val Asn Gly Leu Asn Ala Ala Leu Glu Ala Gln Lys Lys Ala
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## TEHN SENTER 1600/2900

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Input Set : A:\10806-91.app Output Set: N:\CRF3\07312000\I319806.raw

67 Ala Glu Ala Asn Asp Val Pro Lys Leu Val Ser Val Gln Gln Ala Ile 70 Lys Phe Asn Gly Gly Gly His Ile Asn His Ser Leu Phe Trp Lys Asn 71 65 70 80 50 73 Leu Ala Pro Glu Lys Ser Gly Gly Gly Lys Ile Asp Gln Ala Pro Val
74 85 90 95 76 Leu Lys Ala Ala Ile Glu Gln Arg Trp Gly Ser Phe Asp Lys Phe Lys 77 100 105 Asp Ala Phe Asn Thr Thr Leu Leu Gly Ile Gln Gly Ser Gly Trp Gly 115 82 Trp Leu Val Thr Asp Gly Pro Lys Gly Lys Leu Asp Ile Thr Thr Thr 83 130 135 85 His Asp Gln Asp Pro Val Thr Gly Ala Ala Pro Val Phe Gly Val Asp 86 145 150 160 83 88 Met Trp Glu His Ala Tyr Tyr Leu Gln Tyr Leu Asn Asp Lys Ala Ser 86 145 165

91 Tyr Ala Lys Gly Ile Trp Asn Val Ile Asn Trp Ala Glu Ala Glu Asn 92 180 185 190 94 Arg Tyr Ile Ala Gly Asp Lys Gly Gly His Pro Phe Met Lys Leu 195 98 <210> SEQ ID NO: 3

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allergen rAsp f4

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120 gagetetget ccatcatete ecaeggtett tecaaggtea ttgacgeeta caetgetgat 780 121 etggccggtg tcgatggcat tggtggcaag gtcgtccctg gccctacccg tctggtcgtc 840

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## AUG 0 8 2000

## **TECH CENTER 1600/2900**

RAW SEQUENCE LISTING DATE: 07/31/2000 PATENT APPLICATION: US/09/319,806 TIME: 15:13:02

Input Set : A:\10806-91.app
Output Set: N:\CRF3\07312000\I319806.raw

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151 85 90 95 153 Phe Tyr Lys Gly Asn Val Gly Lys Pro Trp Gly Ser Asn Ile Ile Glu
154 100 105 110 156 Val Ser Pro Glu Asn Ala Lys Lys Tyr Lys His Val Ala Gln Phe Val 157 115 120 125 159 Gly Ser Asp Thr Asp Pro Trp Thr Val Val Phe Trp Asn Lys Ile Gly
160 130 135 140 162 Pro Asp Gly Gly Leu Thr Gly Trp Tyr Gly Asn Ser Ala Leu Thr Leu 163 145 150 150 160 165 His Leu Glu Ala Gly Glu Thr Lys Tyr Val Ala Phe Asp Glu Asn Ser 166 165 170 175 168 Gln Gly Ala Trp Gly Ala Ala Lys Gly Asp Glu Leu Pro Lys Asp Gln 169 180 185 171 Phe Gly Gly Tyr Ser Cys Thr Trp Gly Glu Phe Asp Phe Asp Ser Lys 172 195 200 205 174 Ile Asn His Gly Trp Ser Gly Trp Asp Val Ser Ala Ile Gln Ala Glu 175 210 215 220 177 Asn Ala His His Glu Val Gln Gly Met Lys Ile Cys Asn His Ala Gly 178 225 230 230 240 180 Glu Leu Cys Ser Ile Ile Ser His Gly Leu Ser Lys Val Ile Asp Ala 181 245 250 255 183 Tyr Thr Ala Asp Leu Ala Gly Val Asp Gly Ile Gly Gly Lys Val Val 184 260 265 270 186 Pro Gly Pro Thr Arg Leu Val Val Asn Leu Asp Tyr Lys Glu
187 275 280 285 190 <210> SEQ ID NO: 5 191 <211> LENGTH: 336 192 <212> TYPE: DNA 193 <213> ORGANISM: Artificial Sequence 195 <220> FEATURE: 196 <223> OTHER INFORMATION: Description of Artificial Sequence: recombinant allergen rAsp f8 197 199 <400> SEQUENCE: 5 200 atgaagtace tegeagettt ecteeteete geeettgetg geaacacete ecegteetet 60 201 gaggatgtca aggccgtcct ctcttccgtt ggcattgatg ccgatgagga gcgcctgaac 120 202 aageteattg etgagetega gggeaaggae etecaggage teattgeega gggtteeace 180

PATENT APPLICATION: US/09/319,806 Input Set : A:\10806-91.app Output Set: N:\CRF3\07312000\1319806.raw 203 aagetegett eegtteeete eggtggtget geegeegetg eteetgeege tgeeggtgee 240 204 gctgccggtg gtgctgctgc tcctgccgct aaggagaaga atgaggagga gaaggaggag 300 205 tecgaegagg acatgggett eggtetette gaetaa 208 <210> SEQ ID NO: 6 209 <211> LENGTH: 111 210 <212> TYPE: PRT 211 <213> ORGANISM: Artificial Sequence 213 <220> FEATURE: 214 <223> OTHER INFORMATION: Description of Artificial Sequence: recombinant allergen rAsp f8 215 217 <400> SEQUENCE: 6 218 Met Lys Tyr Leu Ala Ala Phe Leu Leu Leu Ala Leu Ala Gly Asn Thr 219 1 221 Ser Pro Ser Ser Glu Asp Val Lys Ala Val Leu Ser Ser Val Gly Ile 25 20 222 224 Asp Ala Asp Glu Glu Arg Leu Asn Lys Leu Ile Ala Glu Leu Glu Gly 225 35 40 45 227 Lys Asp Leu Gln Glu Leu Ile Ala Glu Gly Ser Thr Lys Leu Ala Ser 55 230 Val Pro Ser Gly Gly Ala Ala Ala Ala Pro Ala Ala Ala Gly Ala 231 65 70 75 80 50 233 Ala Ala Gly Gly Ala Ala Ala Pro Ala Ala Lys Glu Lys Asn Glu Glu 90 85 236 Glu Lys Glu Glu Ser Asp Glu Asp Met Gly Phe Gly Leu Phe Asp 105 100 237 240 <210> SEQ ID NO: 7 241 <211> LENGTH: 8 242 <212> TYPE: PRT 243 <213> ORGANISM: Artificial Sequence 245 <220> FEATURE: 246 <223> OTHER INFORMATION: Description of Artificial Sequence: residue for attachment to C-terminus 247 249 <400> SEQUENCE: 7 250 Val Glu His His His His His His 5 254 <210> SEQ ID NO: 8 255 <211> LENGTH: 11 256 <212> TYPE: PRT 257 <213> ORGANISM: Artificial Sequence 260 <223> OTHER INFORMATION: Description of Artificial Sequence: residue for attachment to N-terminal end 261 263 <400> SEQUENCE: 8 264 Met Arg Gly Ser His His His His His Met

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DATE: 07/31/2000

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AUG 08 2000

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VERIFICATION SUMMARY
PATENT APPLICATION: US/09/319,806

DATE: 07/31/2000 TIME: 15:13:03

Input Set : A:\10806-91.app
Output Set: N:\CRF3\07312000\I319806.raw

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